City of Santa Barbara

CREEKS RESTORATION AND WATER QUALITY IMPROVEMENT CITIZENS ADVISORY COMMITTEE

Regular Meeting

Wednesday, May 24, 2006

MINUTES

The regular meeting of the Creeks Restoration and Water Quality Improvement Program Citizens Advisory Committee was called to order by Chair DeVoe at 5:30 p.m. at the Parks and Recreation Department Conference Room.

1. CALL TO ORDER

2. ROLL CALL

Members Present

Myfanwy DeVoe (Chair) Environmental/Land Use

Bruce Klobucher Ocean Users

David Pritchett Environmental/Land Use George Weber Environmental/Land Use Daniel Wilson Community at Large

Members Absent

Daniel E. Hochman Hotel/Lodging Industry
Michael Jordan (Vice Chair) Business Community
Jeff Phillips Environmental/Land Use

Liaison Representatives Present

Beebe Longstreet Park and Recreation Commission

Liaison Representatives Absent

Rob Almy County Project Clean Water Liaison

lya Falcone City Council Liaison

John Jostes Planning Commission Liaison

Staff Present

Jill E. Zachary Creeks Restoration/Clean Water Manager

George Johnson Creeks Restoration Planner

3. APPROVAL OF MINUTES OF THE SPECIAL MEETING OF MAY 10, 2006.

This item has been continued to the next regular meeting of the Creeks Advisory Committee.

4. AGENDA ADJUSTMENTS

None.

5. PUBLIC COMMENT

None.

6. ANNOUNCEMENT

Ms. Zachary announced that the Arroyo Burro Estuary and Mesa Creek Restoration Groundbreaking Ceremony would be held on-site Thursday, June 8, 2006 at 11:00 a.m.

Mr. Pritchett announced that several juvenile fish and at least one adult steelhead trout could be seen in Mission Creek.

7. BUSINESS ITEMS

a. Old Mission Creek Storm Water Management Project at West Figueroa

George Johnson, Creeks Restoration Planner, stated that the purpose of the Old Mission Creek Storm Water Management and Restoration Project at West Figueroa is to improve water quality and restore degraded habitat. He said that the site is approximately two acres with one City-owned parcel and 15 private parcels that are either within or abut the project area which is located between Carrillo and Anapamu streets, downstream from Bohnett Park. Mr. Johnson added that this is an area of high-density urban development and a large natural flood plain.

Mr. Johnson said that the project site was identified in the Creeks Inventory and Assessment Study (2000) and the Bacterial Reduction Study (2002) as a potential location for a creek restoration or storm water management project. He said that this is a key location for a storm water quality treatment project because it has a natural retention basin and there are high levels of bacteria in the creek.

Mr. Johnson said that \$425,000 has been appropriated in the Creeks Capital Program for the Old Mission Creek Storm Water Management and Restoration Project at West Figueroa to fund the design and permitting process as well as act as leverage to receive grant funds.

Mr. Johnson stated that the Committee reviewed the work plan in the fall of 2004 and recommended that water quality be the primary goal of the project, active

filtration treatment be included in the project, not just restoration, easements on the private property be sought, and a wetland within the stream corridor be included. He said that the Park and Recreation Commission reviewed the work plan and recommended that the primary goal be water quality improvement with no active recreation. The Commission also recommended that staff investigate the purchase of the railroad property and encourage the community to act as stewards. He stated that in 2004 a Youth Apprentice Program was implemented to clean up the site and educate the youth. He said that staff has also met with property owners during the spring 2005 and they were generally supportive. He said that the property owners had concerns related to access, visual screening, and mosquito control.

Mr. Johnson said that WRC, a water quality engineering design firm, was hired in January 2006 to develop conceptual plans and feasibility studies for the project. WRC asked to develop a project that would maximize water quality benefits without increasing flood risks, and improve bird and aquatic habitat.

Mr. Johnson reviewed three project alternatives provided by WRC. He said that project alternative #1 is proposed for the City-owned parcel and would include flow-through treatment, a widened creek channel, bank stabilization features, constructed rock weirs, non-native plan removal, native plant and tree installation, and an access ramp and overlook. He said that project alternative #2 is similar to alternative #1 except that it includes 11 private parcels, 5,000 square feet of emergent wetland, 700 linear feet of bank stabilization, the creation of an open water area, and the repair of the culvert opening. Mr. Johnson said that project alternative #3 is proposed for the City-owned property and up to eleven private parcels as well. He said that this alternative includes retention treatment rather than flow-through treatment. He said that the emergent wetland would be 15,000 square feet, and berms and weirs would be constructed to detain water.

Mr. Johnson stated that he met with property owners adjacent to the site, County Flood Control, and City Engineering and that each group was in support of the project. He said that staff will also schedule additional meetings with adjacent property owners.

Mr. Johnson stated that the next steps for the project include selecting the preferred alternative, completing the detailed final concept plans, reviewing the design with permitting agencies, and seeking formal landowner approval. He said that staff is asking that the Committee recommend that the Creeks Division move forward and develop alternative #3 into final concept plans.

Lan Weber, WRC Consulting, said that the project design considerations include topography, access, cultural resources, soils and groundwater, implementation, maintenance and performance. She said that the feasibility analysis indicated that there is natural retention on-site, topographic variation leading to improved biodiversity, mild storm flow velocities, no cultural or infrastructure conflicts, an adequate water supply, moderately impermeable sub-surfaces, low habitat value,

highly erosive soils, and education opportunities.

Ms. Weber stated that water quality treatment potential for this project can be provided by impoundment, filtration, biofiltration, and erosion control. She said that during low-flow periods the creeks would flow normally through the project. She said that during minor storms the gates help control the flow in order to retain the water for up to one week and reduce the total suspended solids and attached fecal coliform.

Margot Grisold said that the list of plants developed for the emergent zones are low-growing species. She said that the goal is to create a self-sustaining habitat that requires irrigation during the first year only. She said that although difficult with invasive species, the removal of non-native species could be done in phases. She said that the sycamore, large eucalyptus, and ash trees could be retained but the smaller eucalyptus trees would be removed. Ms. Griswold said that the recommended planting list would also increase riparian habitat for birds.

Committee Discussion:

Mr. Pritchett asked if the plans are 10% complete and if the excavated soil would be balanced on-site. He asked if staff has sufficient land-owner approval in order to proceed with alternative #3. Mr. Pritchett made several recommendations with regard to types and sizes of trees that should be retained on-site. He asked if a planting palette has been designed and if this project would reduce the peak flow discharge into Mission Creek.

- Ms. Weber responded that the conceptual plans are 20% complete and said that minimal soil export is expected.
- Mr. Johnson responded that staff will need to contact ten additional landowners. He said that the planting palette will be presented at a later date and that the flow discharge to Mission Creek would be reduced only when the Old Mission Creek flow is less than 150 c.f.s. He said that one goal of the Old Mission Creek Storm Water and Restoration Project at West Figueroa is to treat the smaller, more frequent storm flows.

Mr. Wilson asked if the drainage from San Pascal Street is groundwater. He asked if staff had tested the water during low-flow conditions at the top and bottom of the proposed project location and if so, what the results were. Mr. Wilson asked how the control weirs would be manually adjusted. He asked what the residence time should be for maximum water quality improvement. Mr. Wilson asked if the upper portions of the creek banks and hillsides would be replanted and which trees would be retained or removed.

 Mr. Johnson responded that the water is nuisance flow and surface water from the Westside neighborhood. He responded that the water was tested at the Anapamu Bridge and the Westside Drain. Mr. Johnson responded that there would be manual gates at the pipe openings upstream. Mr. Johnson that staff would work with the residents to determine creek banks and hillsides would be revegetated. He said that the native trees and the

- large eucalyptus trees would be retained but the smaller eucalyptus and ash trees would be removed.
- Ms. Zachary responded that she could not speak to the detailed results of the monitoring at this time. She said that this location has been identified as a "hot spot" under storm and dry weather conditions and is the location on Old Mission Creek in which the first flush storm event can be treated.
- Ms. Weber responded the water would need to be retained for 50 to 100 hours, or as long as possible to treat coliform bacteria attached to sediment.

Mr. Klobucher asked if a trail is proposed for this project and if so, where. He asked if staff has contacted all of the key property owners.

- Mr. Johnson responded that a trail was initially proposed by community members to begin at West Figueroa Street, traverse the City parcel, and end at San Pasqual and Carrillo streets but is no longer being considered. He said that he has had contact with seven of the eleven key property owners so far and will mark the property boundaries to help the residents understand the project and the amount of land that the City would like to use for this project.
- Ms. Zachary added that staff had intended to speak with all key property owners prior to this meeting.

Ms. Longstreet said she is pleased to see this project move forward. She said that it is a great "next step" for the Westside neighborhood and assured the public that this would not be a public park but a water quality improvement project.

Public commented opened at 6:54 p.m.

Ms. Lang said that she and her husband, Carson Waller, purchased a lot adjacent to the project in February 2006 and have received one residential meeting notice. She said that she understands that there was a meeting in April but she was not aware of that meeting.

Ms. Lang asked how visual screening, vector control, and transients would be addressed. She said that she is concerned with maintenance since many of the non-native plants to be removed are invasive and difficult to eradicate. She said that there is currently a mattress in the culvert and trash in the creek and she is concerned that this type of trash will be more visible as the creek is widened and made shallower. Ms. Lang also asked how long the excavation would take place and if the berms would be used as walkways. She stated that there are monarch butterflies, mallard ducks and skunks living in this reach of the creek. She asked how the flow would be improved by widening the creek.

Mr. Waller said that he understands the project from a water quality standpoint but as a landowner he is concerned that his visual screening will be removed. He said that there are also songbirds, frogs, and a hawk living in this reach of the creek.

Public comment closed at 7:00 p.m.

Mr. Johnson offered to meet with Ms. Lang and Mr. Waller to discuss their concerns. He stated that maintenance of the project would be in perpetuity and that construction would likely take less than two months.

Mr. Wilson stated that this project location was recommended for restoration activities based on the removal of non-native vegetation. He said that he cannot endorse the project without knowing the water quality data upstream and downstream of the project location. Mr. Wilson added that the Old Mission Creek Restoration Project at Bohnett Park and the Westside SURF project are both upstream of this site, reducing the cost-benefit of this project.

Ms. Zachary responded that many of the Committees questions will be answered once one of the three alternatives has been selected. She said that the Westside SURF project upstream is designed to treat dry-weather flows and this project is designed for wet-weather. She said that the cost-benefit will be known after the project is constructed and that the Bacteria Reduction Study (2002) identified the most feasible locations to do work on. She said that for the past couple of years, this project has been a line-item in the Creeks Division budget with the intention of moving forward.

ACTION

Pritchett moved, seconded by Klobucher and passed 5/0, that the Committee recommend that the Creeks Division develop alternative #3 into final concept plans.

b. Review Second Year Benthic Macro Invertebrate and Tidewater Goby Study Results

Mr. Johnson stated that the purpose of the BMI and tidewater goby population surveys was to get baseline data prior to the installation of restoration or water quality projects near the estuaries. He said that lifeguards have been trained to deter people from breaching the lagoons and signs have also been installed. Mr. Johnson said that the monitoring locations have also increased.

Marc Beccio, ECORP, gave a brief presentation on the results of Benthic macro invertebrate and tidewater goby surveys conducted in the Arroyo Burro and Mission Creek estuaries during 2005. He said that the tidewater goby population surveys took place in May, June, August, and October while the BMI surveys took place May through November. Mr. Beccio said that sampling was conducted in the lower, middle, and upper estuarine sections, and upstream riverine habitat.

Mr. Beccio said that water quality measurements were collected concurrently with the fish and BMI surveys. He said that temperature, dissolved solids, conductivity and pH and were measured at the surface and off the bottom of the estuaries. Mr. Beccio said that the methods used to sample for BMI include 1) collecting five grab samples of sediment from each site for each survey event, 2) sorting BMI samples and identifying them in the laboratory, and 3) entering the data into a spreadsheet

for metrics calculations. The methods used to sample for tidewater goby include 1) pulling a five-meter beach seine to the shore from seven meters offshore, 2) identifying, measuring, and releasing captured fish, and 3) visually identifying by 10 mm size class and immediately returning the fish to the water.

Mr. Beccio stated that the salinity of Arroyo Burro estuary has decreased from May through September, resulting in good rearing conditions and only one major breach event occurred during the period of surveys, which resulted in high salinity values. Mission Creek experienced two major breach events, which resulted in fluctuating salinity values throughout the survey period.

Mr. Beccio stated that the BMI community structure is noticeably different between the estuarine and riverine habitats with only eight taxa common to both whereas 14 taxa were found solely in the estuary and another 14 taxa were identified in the riverine habitat. Mr. Beccio said that nine taxa were common to both the Mission Creek estuary and creek habitats whereas eight taxa were found solely in the estuary and 22 taxa were found solely in the riverine habitat.

Mr. Beccio said that the Ostracoda (preferred prey of the tidewater goby) are abundant in both estuaries but the population fluctuates as a result of estuary breaching. He said that the BMI community structure is also different between the estuarine and riverine habitats. Mr. Beccio stated that the Ostracoda thrive in the estuary, and are not dependent upon riverine habitat for reproduction. He said that the abundance of BMIs in both estuaries does not appear to be the limiting factor to tidewater goby populations.

Mr. Beccio said that the tidewater goby population appears to be dependent upon the quality of physical habitat and the timing of the lagoon breaches. He said that the Arroyo Burro estuary supports a more robust tidewater goby population than the Mission Creek estuary due to the presence of more favorable habitat and water quality conditions. He said that adult tidewater goby appear to die-off after the May/early June spawning event. He added that in 2005, both the Arroyo Burro and Mission Creek tidewater goby populations were greatest in August, declining substantially after the October breach event.

Mr. Beccio said that during the surveys in the Mission Creek estuary upstream of the Mason Street Bridge, a locally robust population of tidewater gobies was observed ten meters from the Yananoli Street Bridge. He said that based on the tidewater goby surveys conducted by Lafferty (1995) and ECORP (2004, 2005) it appears that the tidewater goby populations in Arroyo Burro estuary are relatively stable.

Mr. Beccio recommended that restoration or construction projects with the short-term potential to adversely affect tidewater goby populations not be initiated until spawning is completed. Mr. Beccio said that since tidewater goby populations are highest in the upper portions of the estuaries, restoration or construction projects in the area should be carefully reviewed prior to initiation. He said that

anthropogenic activities that negatively impact water quality in the riverine habitat would likely have the greatest impact on the upper sections of Arroyo Burro Creek and Mission Creek estuaries where the tidewater goby populations are robust. He said that a water quality-monitoring program targeting freshwater discharge into the estuary would be of considerable value.

Mr. Beccio also recommended that an additional year of BMI and tidewater goby surveys be undertaken. He recommended that plankton sweep surveys not take place since two years of data have not provided evidence of downstream drift of BMIs from riverine habitat.

Committee discussion:

Mr. Klobucher asked if the Arroyo Burro and Mesa Creek Restoration Project would have a negative impact on the BMI or tidewater goby habitats. He asked what type of impact the project would have on the tidewater goby.

Mr. Johnson responded that vegetation removal would occur during late
June and dewatering would take place in August, which should not affect
spawning. He said that the project is designed to enhance the habitat by
creating additional emergent, shallow wetland habitat.

Mr. Weber asked if the BMI index applies to estuaries as well as freshwater. He asked if the tolerance of the communities was analyzed to determine the viability of the estuaries.

• Mr. Beccio stated that the BMI index used has been adapted for estuaries but was designed for freshwater. He added that the Environmental Protection Agency is working on an estuarine index. Mr. Beccio responded that the organisms are highly tolerant but during the early season there are intolerant species that are replaced by Ostracods.

Mr. Wilson asked that a copy of the survey results be forwarded to the Planning Commission and staff.

8. STAFF REPORT

a. Manager's Program Update

Ms. Zachary announced that the Citizen's Guide to Santa Barbara's Watersheds is near completion. She said that the guide would be distributed to each mailing address in Santa Barbara. Ms. Zachary said that a community forum is scheduled for June 20th and that an invite was included in each of the community guides. The focus of the forum would be to discuss community priorities and upcoming technical workshops.

 Ms. Longstreet recommended that the City's Committees and Commissions participate in a similar forum.

Ms. Zachary said that the Big Dog Parade on June $3^{\rm rd}$ is the first of several outreach events scheduled June. She said that the Arroyo Burro Estuary and

Mesa Creek Restoration Project groundbreaking ceremony would be taking place June 8th. She said that a creek clean-up is scheduled June 17th and the Kids Creek Fest will be held at on the 20th, both at Arroyo Burro beach.

Ms. Zachary reported that the Westside SURF Project construction is scheduled to begin June 12th. She said that Council has also approved the construction contract for the Arroyo Burro Estuary and Mesa Creek Restoration Project and a second newsletter has been distributed to area residents.

b. Tentative Meeting Agenda

None.

9. ADJOURNMENT

At 7:22 p.m. there being no further business to come before the Committee,

ACTION:

Wilson moved, seconded by Klobucher and passed 5/0 that the meeting be adjourned.

Respectfully submitted,

Jill E. Zachary Creeks Restoration/Clean Water Manager